

## **REMARKS**

This paper is presented in response to the Final Office Action. No claims are canceled, amended or added by this paper. Claims 1-5 and 25-27 were previously withdrawn by the Examiner as directed to an unelected invention, and claims 12 and 22 were canceled in a previous paper. Claims 6-11, 13-21 and 23-24 remain pending.

Reconsideration of the application is respectfully requested in view of the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

### **I. General Considerations**

Applicant notes that the remarks presented herein have been made merely to clarify the claimed embodiments from elements purported by the Examiner to be taught by the cited reference. Such remarks, or a lack of remarks, are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicant: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicants reserve the right to challenge the purported teaching and prior art status of the cited references at any appropriate time.

In addition, the remarks herein do not constitute, nor are they intended to be, an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed herein are presented solely by way of example. Consistent with the foregoing, the discussion herein is not intended, and should not be construed, to prejudice or foreclose contemporaneous or future consideration, by the Applicants, of additional or alternative distinctions between the claims of the present application and any references cited by the Examiner, and/or the merits of additional or alternative arguments.

### **II. Rejection of Claims 6-11 and 13-14 under 35 U.S.C. § 103**

Applicants respectfully note at the outset that in order to establish a *prima facie* case of obviousness, it is the burden of the Examiner to demonstrate that three criteria are met: first, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; second, there must be a reasonable expectation of success; and third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP* § 2143.

**a. claims 6-11 and 13-14**

The Examiner has rejected claims 6-11 and 13-14 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,871,022 to Xu (“Xu”) in view of U.S. Patent No. 6,278,818 to Laming et al. (“Laming”). Applicants respectfully disagree.

In rejecting the claims, the Examiner has alleged that “Xu discloses in Figures 6, 16A-B, and 19A-B, an optical add/drop module ... comprising [a] drop portion ... [and an] add portion ... wherein the add portion comprises [a] first stage of interleavers ... and a final stage including a thin film interleaver ...” However, the Examiner has failed to identify which component(s) of Xu are purported to constitute the alleged “drop portion,” “add portion,” “first stage of interleavers” and “final stage” recited in the rejection. The same is likewise true with respect to the rejection of claims 9-11 and 14 – as but one example, the Examiner has asserted that “As to claim 13, channel isolation and suppressed crosstalk is achieved.”, but has completely failed to provide any evidence whatsoever in support of that assertion.

Instead, the Examiner has relied on little more than a single vague reference to the Xu figures in support of the rejection of claims 6-11 and 13-14. Thus, the Examiner has left Applicant to guess at which component(s) of Xu are believed by the Examiner to correspond with the elements of the rejected claims. This much, Applicant respectfully declines to do, at least because the Examiner bears the burden of establishing, *prima facie*, the obviousness of the claims.

Moreover, “... in rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.” 37 CFR 1.104. *Emphasis added.* In this regard, “[t]he goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity.” MPEP § 706.

With regard to the failure of the Examiner to specifically address the foregoing, and other, limitations of the rejected claims, Applicant submits that if the origin of teachings and motivation set forth for the proposed combinations are believed by the Examiner to be present in the references, then the Applicants request that this origin be set forth as suggested by MPEP 2144.08 III which states, “[w]here applicable, the finding should clearly articulate which portions of the reference support any rejection.” Explicit findings on motivation or suggestion to select the claimed invention should also be articulated in order to support a 35 U.S.C. 103 ground of rejection. *Dillon*, 919 F.2d at 693, 16 USPQ2d at 1901; *In re Mills*, 916 F.2d 680, 683, 16 USPQ2d 1430, 1433 (Fed. Cir. 1990). Conclusory statements of similarity

or motivation, without any articulated rationale or evidentiary support, do not constitute sufficient factual findings.” *Emphasis added.* Applicant notes that the foregoing points are germane as well to the discussion, below, of the purported motivation for the allegedly obvious combination.

As to the purportedly obvious modification and alleged motivation for that combination, the Examiner has conceded that “Xu fails to explicitly disclose the use of a ‘fused fiber’ interleaver but does disclose that interleavers are conventionally made by fusing together two optical fibers ...” and then goes on to assert that “Laming teaches a channel add/drop multiplexer using a fused optical fiber coupler to extract (drop) a specified wavelength . . . It would have been obvious ... to use the fused optical fibers of Laming as the interleavers of Xu for the motivation of reducing cost, bulk and to lower insertion losses.”

Notwithstanding these allegations by the Examiner, it would appear that, in fact, *Xu teaches away* from the combination proposed by the Examiner. For example, *Xu* discloses a “fused biconical taper (FBT) fiber coupler” about which *Xu* states that “[u]nfortunately, the FBT [fused biconical taper] coupler is only suited for separating channels whose wavelengths are relatively far apart. To achieve the multi-window WDMs or small channel spacing, it is necessary to significantly increase the length of the fused and tapered region, which has presented significant difficulties in manufacturing.” *Col. 2, lines 9-14. Emphasis added.*

In light of this teaching in *Xu*, it seems clear that one of ordinary skill would not be inclined to use the “fused optical fibers” of *Laming* as the interleavers for *Xu*, such as the Examiner has alleged would be obvious to do.

As to the purported motivation for the allegedly obvious modification of the *Xu* device with the purported teachings of *Laming*, Applicants note that the Examiner has asserted that “It would have been obvious ... to use the fused optical fibers of Laming as the interleavers of Xu for the motivation of reducing cost, bulk and to lower insertion losses.” Applicant notes however, that the Examiner has failed to establish that the *Xu* device suffers from such shortcomings as could, or would, be remedied by the purported disclosure of *Laming*. To the contrary, *Xu* teaches that:

A WDM interleaver in accordance with the present invention provides a high tolerance to wavelength drift, insensitivity to temperature and other environmental changes, and is easy to align, fabricate, and package. Insertion losses are low, and the cascading of stages does not accumulate losses. Mechanisms that precisely adjust an interleaver's center wavelength and output spectrum shape are also provided.

*Col. 3, lines 14-20. Emphasis added.* In the absence of any evidence that the *Xu* device is somehow deficient in terms of its size or insertion loss performance, Applicant submits that the Examiner has failed to establish the existence of a suggestion or motivation to make the purportedly obvious combination.

Finally, the Examiner has alleged that one of skill would be motivated to make the allegedly obvious combination in the interest of “reducing cost.” However, Applicant notes that “reducing cost” is

a relative term. For example, it is not at all apparent what reference point(s), if any, the Examiner is using as a basis to assert that a reduction in cost would necessarily be achieved as a result of the purportedly obvious combination. For at least this reason, Applicant submits that the Examiner has failed to establish the existence of a suggestion or motivation to make the purportedly obvious combination.

In view of the foregoing discussion, Applicant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 6-11 and 13-14, at least because the Examiner has not established that the references, when combined in the purportedly obvious fashion, teach or suggest all the limitations of the rejected claims, and because the Examiner has not established the existence of a suggestion or motivation to make the purportedly obvious combination. Accordingly, Applicant respectfully submits that the rejection of claims 6-11 and 13-14 should be withdrawn.

**b. claims 15-21 and 23-24**

The Examiner has rejected claims 15-21 and 23-24 under 35 U.S.C. § 103(a) as being unpatentable over *Xu* as applied to claims 6-11 and 13-14 and further in view of what the Examiner has characterized as “applicant’s disclosure of prior art.” Applicant respectfully disagrees.

To the extent that the rejection of claims 15-21 and 23-24 relies on the characterization of *Xu* advanced by the Examiner in connection with the rejection of claims 6-11 and 13-14, the rejection of claims 15-21 and 23-24 is defective for at least the reasons set forth at II.a. above and, accordingly, the attention of the Examiner is respectfully directed to such discussion.

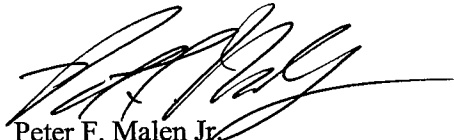
In light of the foregoing, Applicant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 15-21 and 23-24, at least because the Examiner has not established that the references, when combined in the purportedly obvious fashion, teach or suggest all the limitations of the rejected claims, and because the Examiner has not established the existence of a suggestion or motivation to make the purportedly obvious combination. Accordingly, Applicant respectfully submits that the rejection of claims 15-21 and 23-24 should be withdrawn.

**CONCLUSION**

In view of the remarks submitted herein, Applicants respectfully submit that each of the pending claims 6-11, 13-21 and 23-24 is in condition for allowance. Therefore, reconsideration of the rejections is requested and allowance of those claims is respectfully solicited. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this 21<sup>ST</sup> day of September, 2006.

Respectfully submitted,



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